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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,262	12/21/2001	Takeo Seino	Q67855	4884

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EXAMINER

VO, ANH T N

ART UNIT	PAPER NUMBER
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2861

DATE MAILED: 11/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/024,262

Applicant(s)

SEINO ET AL. *Aw*

Examiner

Anh T. N. Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 09/04/2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-12 is/are rejected.
- 7) ☒ Claim(s) 6 and 7 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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FINAL REJECTION

Response to Applicant's Amendment

The objection to claim 11 is withdrawn in view of the amendment to the claim.

The rejection over Gasvoda et al. (US Pat. 5,949,459) is withdrawn in view of the amendments to the claims.

Claims Rejections

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior arts are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 8-12 are rejected under 35 U.S.C. 103 (a) as being anticipated by Shimada et al. (US Pat. 6,086, 139).

Schemata et al. disclose in Figures 1, 3, 6-8 and 12 an ink cartridge using in an ink jet printer comprising:

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- a container (70) having a bottom surface and defining at least one ink chamber (102a-102e) (Figure 6);
- a protruded portion (112) protruded from the bottom surface (108) and defining an ink supply passage (Figure 6);
- an ink supply port (110a-110e), provided to the protruded portion (112), having an opening surface substantially perpendicular to the bottom surface (Figures 6-7);
- a guide portion (117) located between the bottom surface (108) and the opening surface (Figure 8);
- a normally-closed valve system provided near the ink supply port .
- a recess (134a-134d) communicating with the ink chamber (102a-102e) and formed in an upper surface of the container (70) (Figures 7-8 and 12);
- a breakable film (135) sealing the recess (134a-134e) (Figures 7-8 and 12);
- a capillary of a narrow groove (133) formed in the upper surface (120) of the container (70), wherein the recess (134a-134d) communicates with the ink chamber (102a-102e) through the capillary (Figures 7-8 and 12);
- a reciprocally movable carriage (30) (Figures 1 and 3);
- an ink jet recording head (28) provided on the carriage (30) (Figure 3);
- an ink guide member (117) through which ink in the ink cartridge (70a-70e) being mounted on the carriage (30) is supplied to the ink jet recording head (28), the ink guide member (117) having a horizontally protruded leading end (Figures 3 and 6-8);
- a protrusion (101), horizontally protruded near the ink guide member (117), for engagement with the ink cartridge (70a-70e);
- wherein the ink supply passage (110a-110e) is disposed at a predetermined distance from the bottom surface (108) and located within an area below the bottom surface (Figures 7-8);

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- wherein the ink supply port (110a-110e) is connectable to an ink guide member (72-76) communicating with a recording head (28) of an ink jet recording apparatus (20) (Figures 1, 3 and 7-8); and
- wherein the guide portion (117) is guided by a protrusion (101) of an ink jet recording apparatus (20) when the ink supply port (110a-110e) is connected to an ink guide member (72-76) communicating with a recording head (28) of the ink jet recording apparatus (20) (Figures 1, 3, and 7-8).

However, Shimada et al does not disclose that the ink supply port having an opening substantially perpendicular to the bottom wall and located within an area of the bottom wall as recited in claim 1 and the recording head is provided on a lower wall of the carriage as recited in claim 5. Since the ink cartridge of schemata et al is mounted on the cartridge holder, a skilled artisan recognizes that the shape of the protrusion portion should be accommodated with the provided shape on the holder provided by the carriage and the location of the recording head should be accommodated with the structure of the carriage. Thus, rearranging the protrusion portion or the location of the recording head is considered to be a matter of a design expedient for an engineer. *In re Japikse*, 86 USPQ 70.

It would have been obvious to rearranging the location of the recording head and the shape of the protrusion portion of Schemata et al so that the opening of the supply port is perpendicular to the bottom wall for the purpose of accommodating with the shape of the holder provided by the carriage.

Response to Applicant's Arguments

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The applicant argues that the opening wall of the ink supply port of Shimada et al is not perpendicular to the bottom wall of the ink container and the recording head is at a lower wall of the carriage. The argument is not persuasive because rearranging the location of the recording head and the shape of the protrusion portion of Shimada et al is considered to be a mechanical design expedient for an engineer. *In re Japikse*, 86 USPQ 70.

Allowable Subject Matter

Claims 6-7 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. These claims would be allowable because none of the prior art references of record discloses the breaking system breaks the film before the ink guide member engages the ink cartridge to allow ink to be supplied to the ink jet recording head in the combination as claimed.

CONCLUSION

THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (703) 305-8194. The examiner can normally be reached on Tuesday to Friday from 8:00 A.M. to 6:00 P.M.

The fax number of this Group 2800 is (703) 305-3431 or 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, appearing to be 'Anh T.N. Vo', with a stylized, cursive script.

ANH T.N. VO
PRIMARY EXAMINER

November 6, 2003